

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
1 April 2004 (01.04.2004)

PCT

(10) International Publication Number
WO 2004/027083 A2

- (51) International Patent Classification⁷: C12Q 1/00, (74) Agents: DUBUC, J. et al.; Goudreau Gage Dubuc, Stock 1/26, G01N 27/327 Exchange Tower, 800 Place Victoria, Suite 3400, P.O. Box 242, Montreal, Quebec, H4Z 1E9 (CA).
- (21) International Application Number: PCT/CA2003/001429 (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 19 September 2003 (19.09.2003)
- (25) Filing Language: English (26) Publication Language: English
- (30) Priority Data: 60/411,866 20 September 2002 (20.09.2002) US
- (71) Applicant (for all designated States except US): MEDIN-NOV, INC. [CA/CA]; 390 St-Vallier Est, Suite SS01, Quebec, Quebec G1K 3P6 (CA).
- (72) Inventors; and (75) Inventors/Applicants (for US only): DOUVILLE, Pierre [CA/CA]; 2381 Ave Power, Sillery, Quebec G1T 1N8 (CA). ROUSSEAU, François [CA/CA]; 1006 des Chrysolithes, Charlesbourg, Quebec G2L 3C4 (CA). FOREST, Jean-Claude [CA/CA]; 840 Ave des Braves, Quebec, Quebec G1S 3C4 (CA).

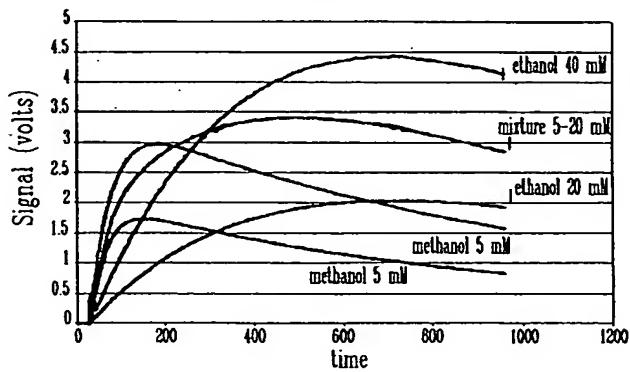
Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: AN ANALYZER FOR THE SIMULTANEOUS ENZYMATIC DETECTION OF CLOSELY RELATED ANALYTES

Examples of differential kinetic responses from alcohols



(57) Abstract: An analyzer and a method for simultaneously detecting and measuring the concentration of two related analytes, the analytes being substrates for a common enzyme. The analyzer comprises an enzymatic reaction monitoring component including a support base, a mixed electrode system consisting of a working electrode, an auxiliary electrode and a reference electrode, the mixed electrode system being supported by said support base, and an enzymatic reaction means incorporating the enzyme, the enzymatic reaction means being disposed on the mixed electrode system; whereby, when the enzymatic reaction means is placed in contact with a liquid sample containing the two related analytes, the two related analytes chemically react with the enzyme to produce an electronic signal directly related to the concentration of each of the two related analytes in said liquid sample; a detector including a sensor, the detector being connected to the enzymatic reaction monitoring component and capable of continuously detecting and amplifying said electronic signal to produce amplified signals; and a data processor capable of converting the amplified signals into numerical data representative of the concentration of each of the two related analytes.

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